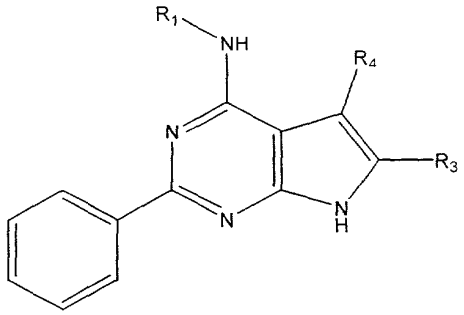
What is claimed is:

1. A compound having the structure:

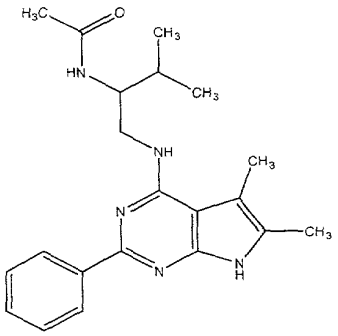


VII

wherein R_1 is 3-hydroxy cyclopentyl ethylamino carbonylamino propyl, N,N-diethylamino carbonylamino ethyl, thioacetamido ethyl, 3-amino acetyloxy cyclopentyl, 3-hydroxy cyclopentyl, 2-pyrrolyl carbonyl aminoethyl, 2-imidazolidinone ethyl, 1-aminocarbonyl-2-methyl propyl, 1-aminocarbonyl-2-phenyl ethyl, 3-hydroxy azetidino, 2-imidazolyl ethyl, acetamido ethyl, 1-(R)-phenyl-2-hydroxyethyl, or N-methylaminocarbonyl pyridyl-2- methyl;

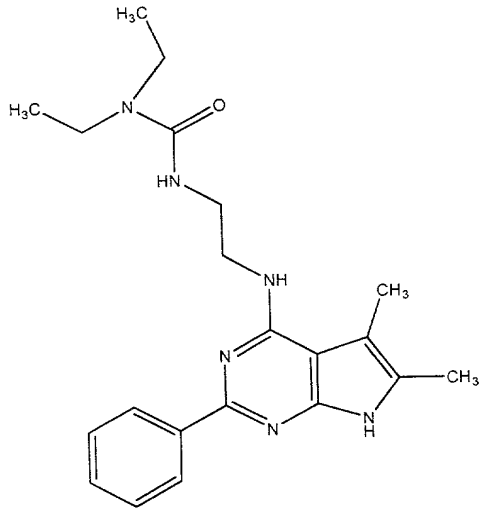
wherein R_3 and R_4 are independently H, substituted or unsubstituted alkyl, or aryl.

2. The compound of claim 1, having the structure:



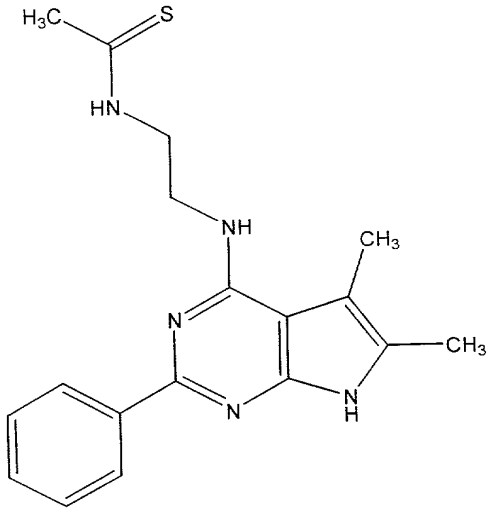
(Compound 1700)

3. The compound of claim 1, having the structure:



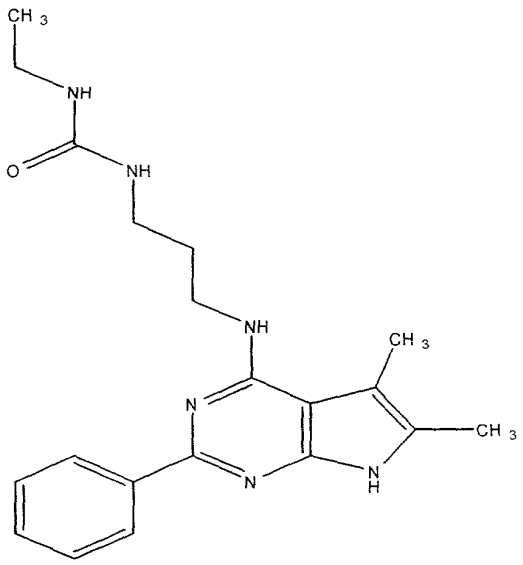
(Compound 1701)

4. The compound of claim 1, having the structure:



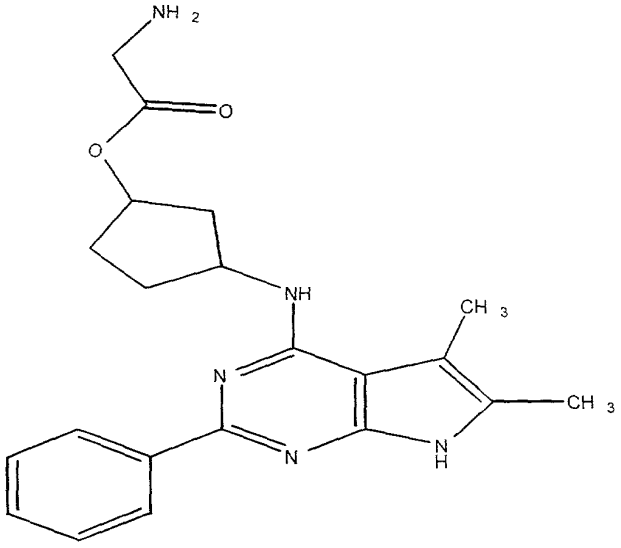
(Compound 1702)

5. The compound of claim 1, having the structure:



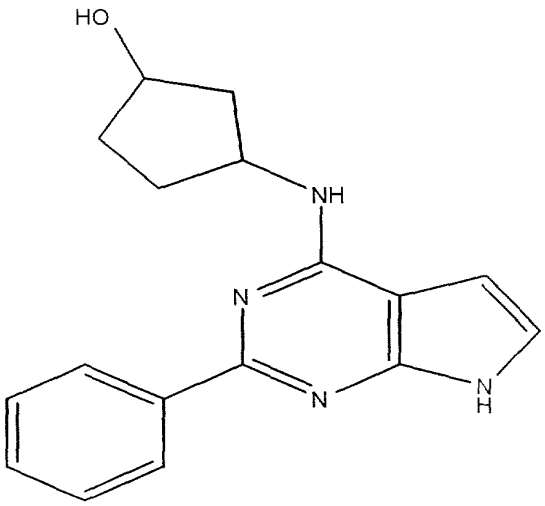
(Compound 1704)

6. The compound of claim 1, having the structure:



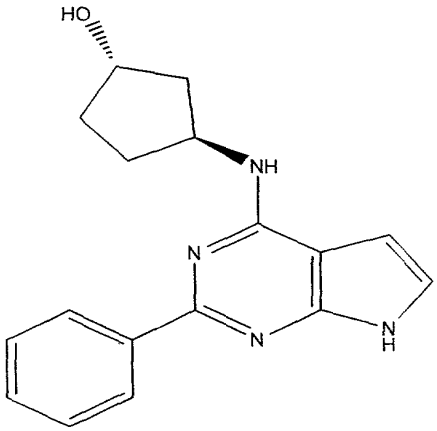
(Compound 1705)

7. The compound of claim 1, having the structure:

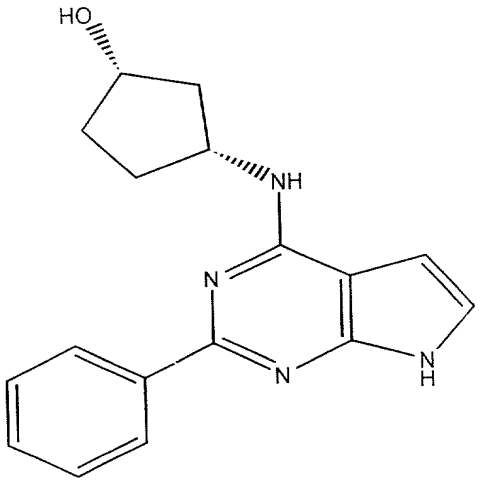


(Compound 1706)

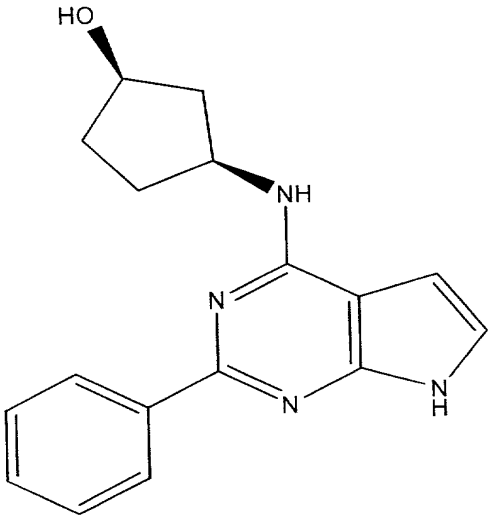
8. The compound of claim 7, having the structure:



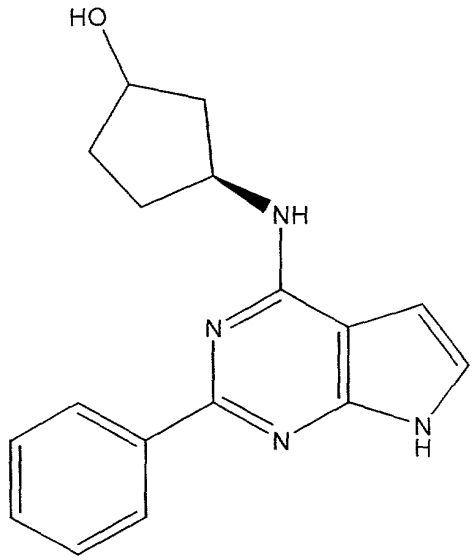
9. The compound of claim 7, having the structure:



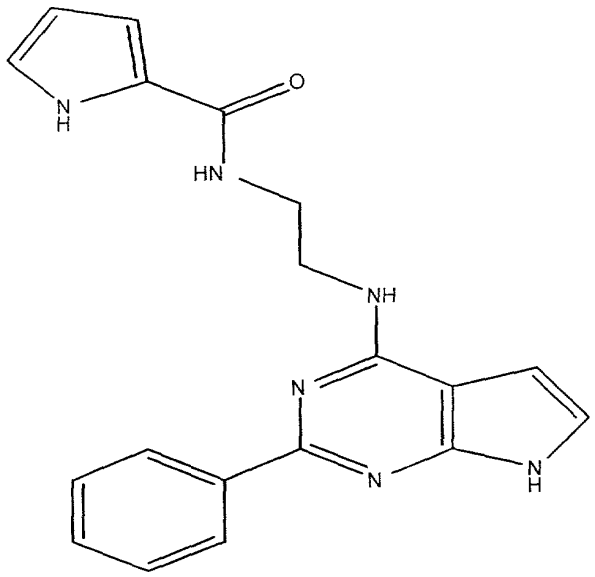
10. The compound of claim 7, having the structure:



11. The compound of claim 7, having the structure:

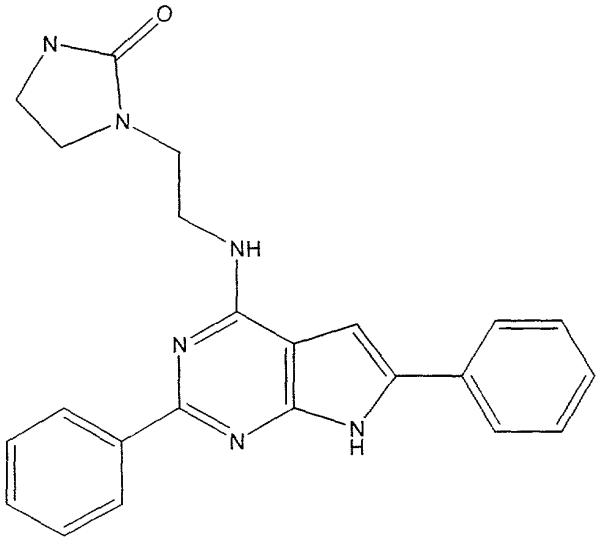


12. The compound of claim 1, having the structure:



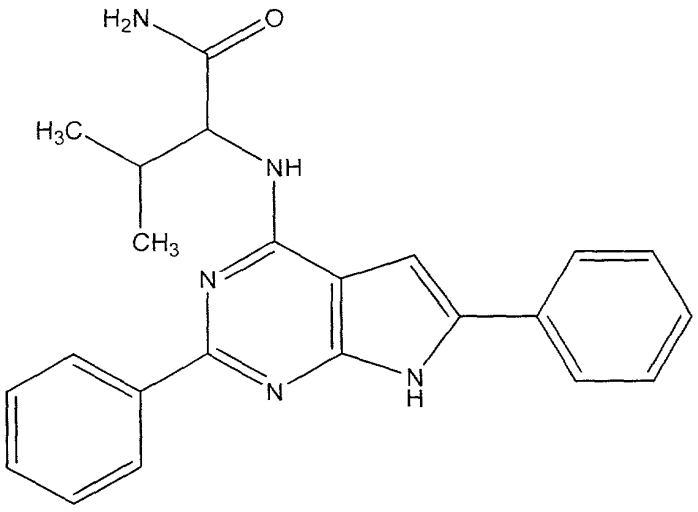
(Compound 1707)

13. The compound of claim 1, having the structure:



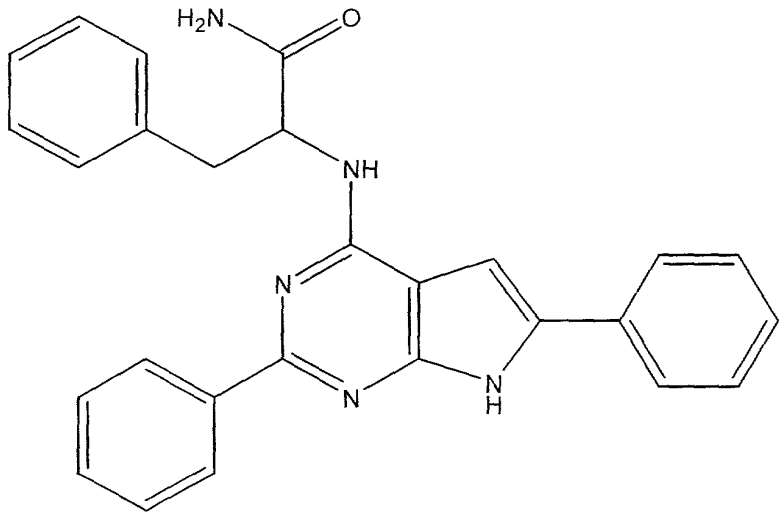
(Compound 1708)

14. The compound of claim 1, having the structure:



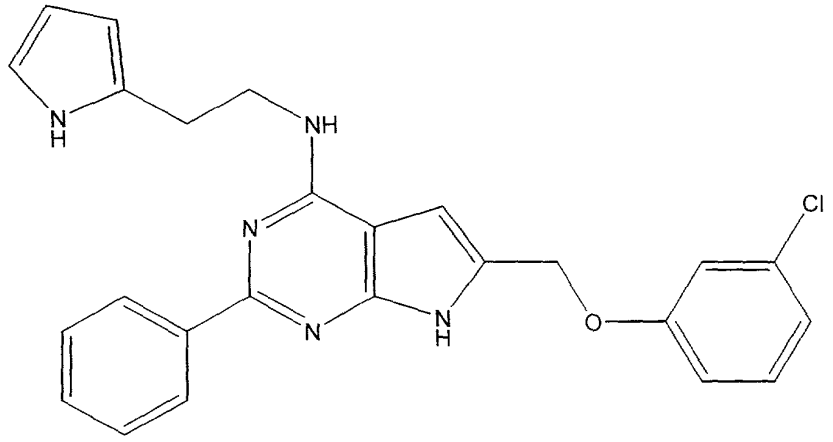
(Compound 1709)

15. The compound of claim 1, having the structure:



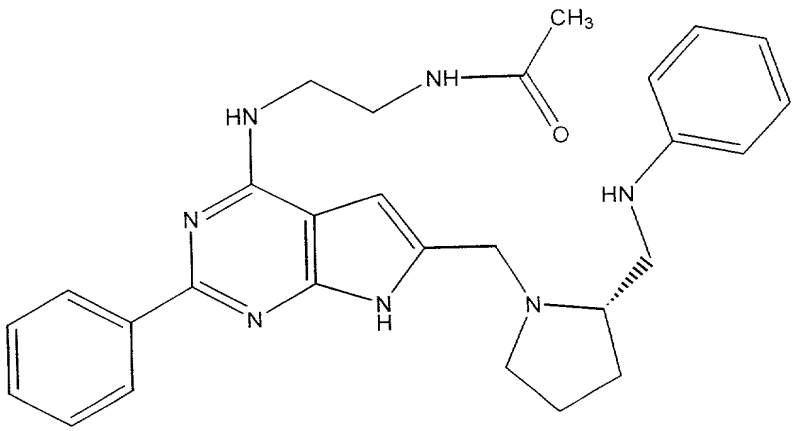
(Compound 1710)

16. The compound of claim 1, having the structure:



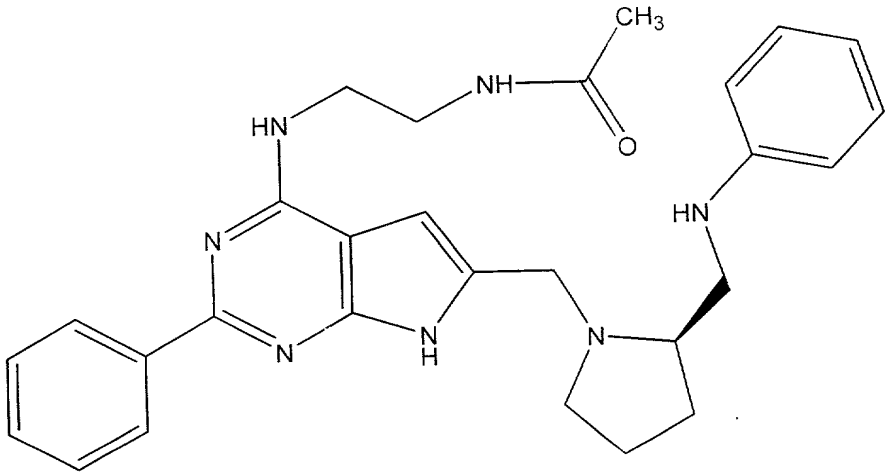
(Compound 1712)

17. The compound of claim 1, having the structure:

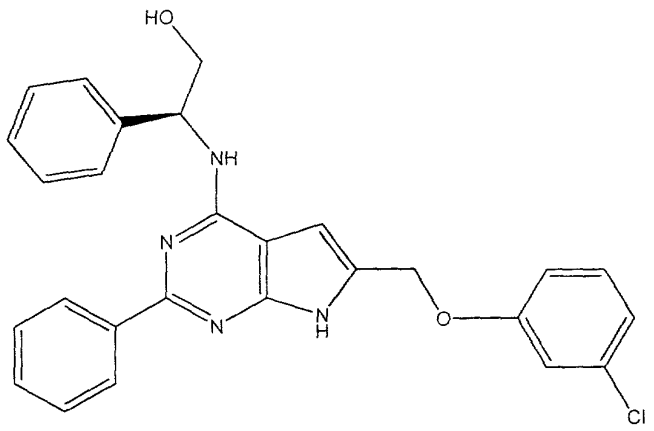


(Compound 1713)

18. The compound of claim 17, having the structure:

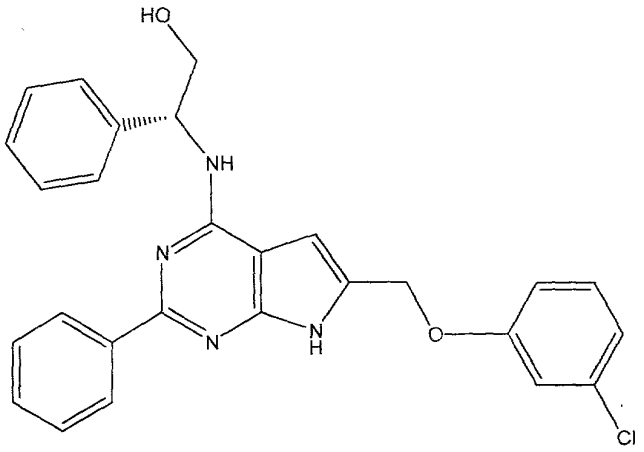


19. The compound of claim 1, having the structure:

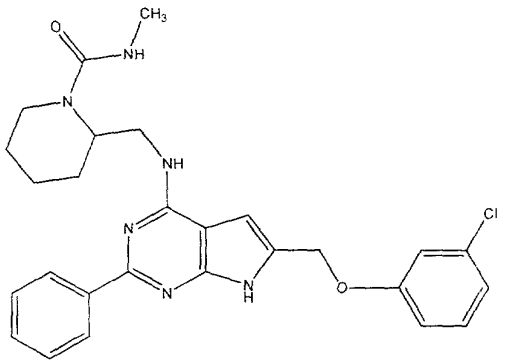


(Compound 1714)

20. The compound of claim 19, having the structure:

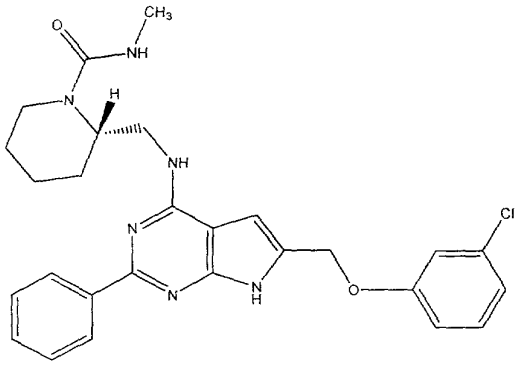


21. The compound of claim 1, having the structure:

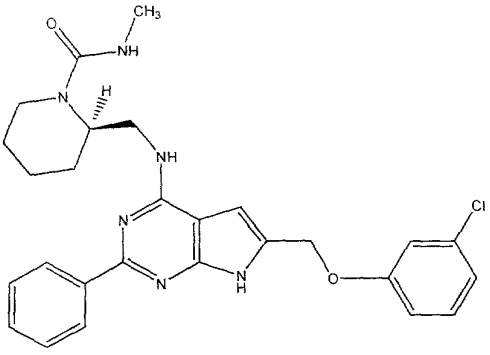


(Compound 1715)

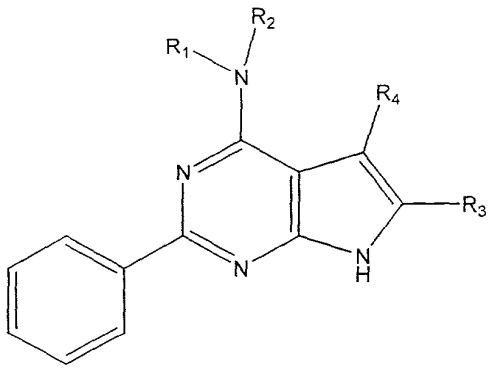
22. The compound of claim 21, having the structure:



23. The compound of claim 21, having the structure:



24. A compound having the structure:

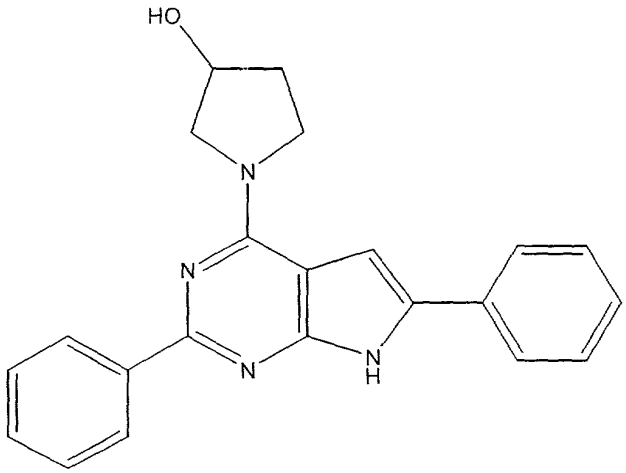


VIII

wherein R_1, R_2 and the nitrogen together are 3-hydroxy pyrrolidino, 3-methyloxy carbonylmethyl pyrrolidino, 3-aminocarbonylmethyl pyrrolidino, or 3-hydroxymethyl piperadino;

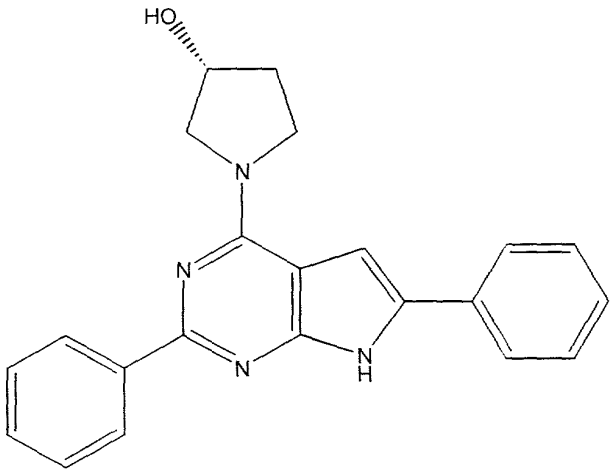
wherein R_3 and R_4 are independently H, substituted or unsubstituted alkyl, or aryl.

25. The compound of claim 24, having the structure:

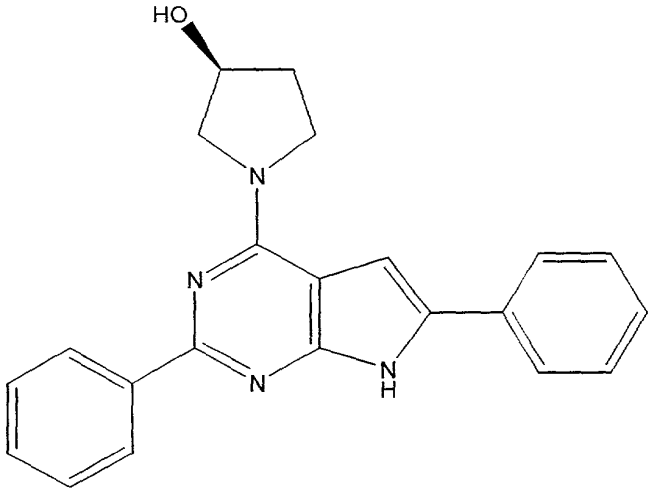


(Compound 1703)

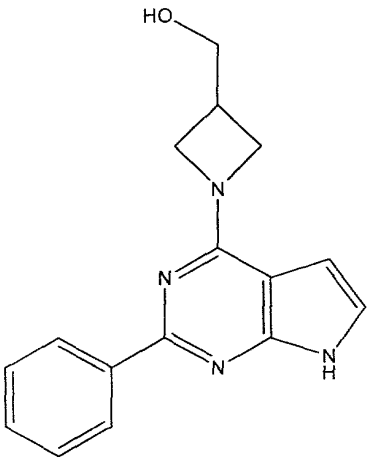
26. The compound of claim 25, having the structure:



27. The compound of claim 25, having the structure:

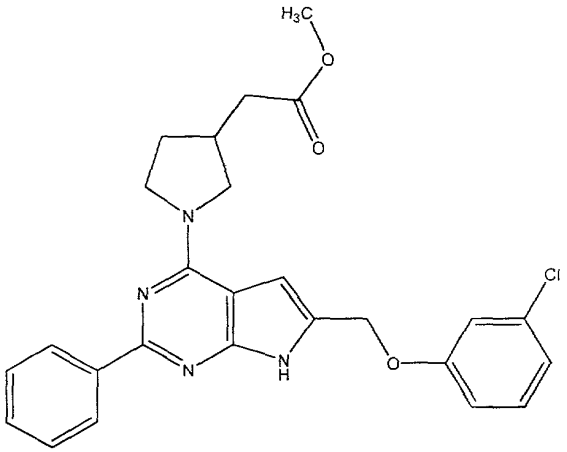


28. The compound of claim 24, having the structure:



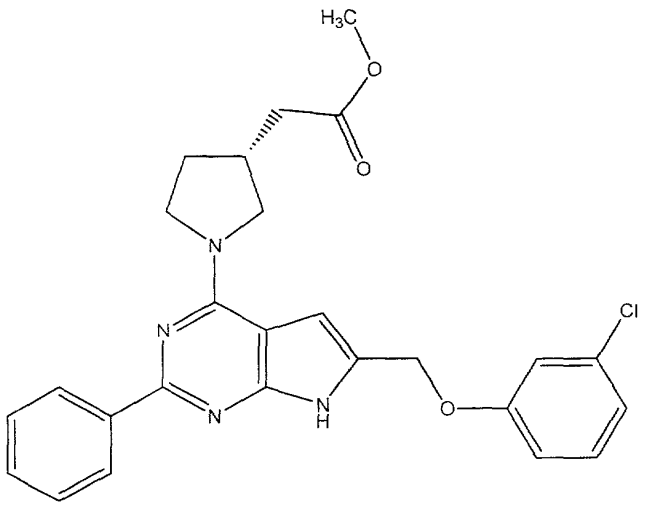
(Compound 1711)

29. The compound of claim 24, having the structure:

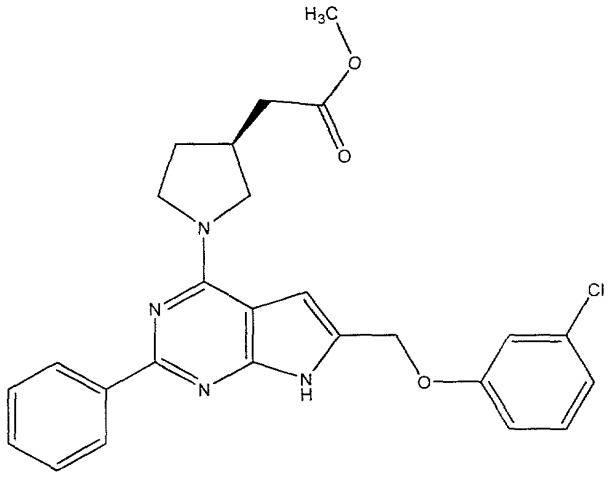


(Compound 1716)

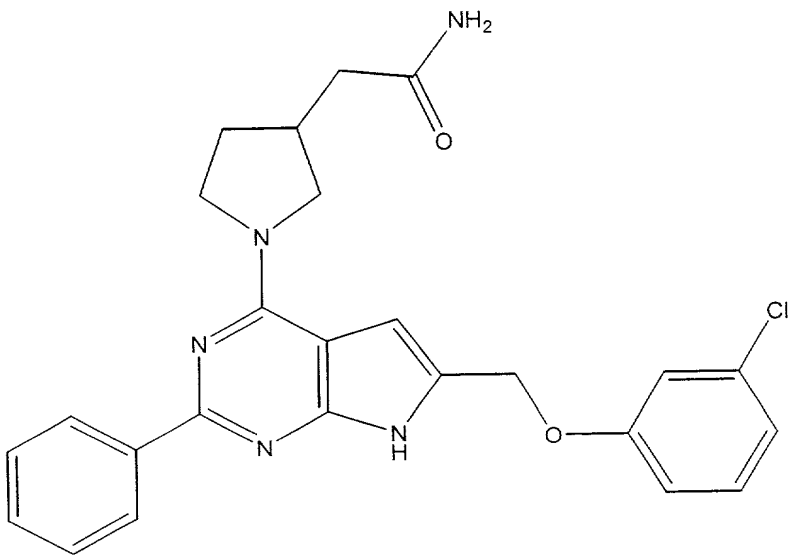
30. The compound of claim 29, having the structure:



31. The compound of claim 29, having the structure:

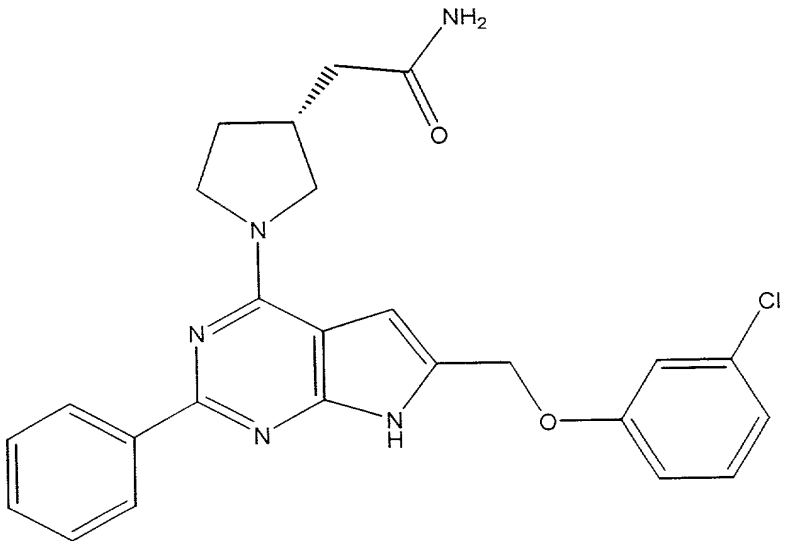


32. The compound of claim 24, having the structure:

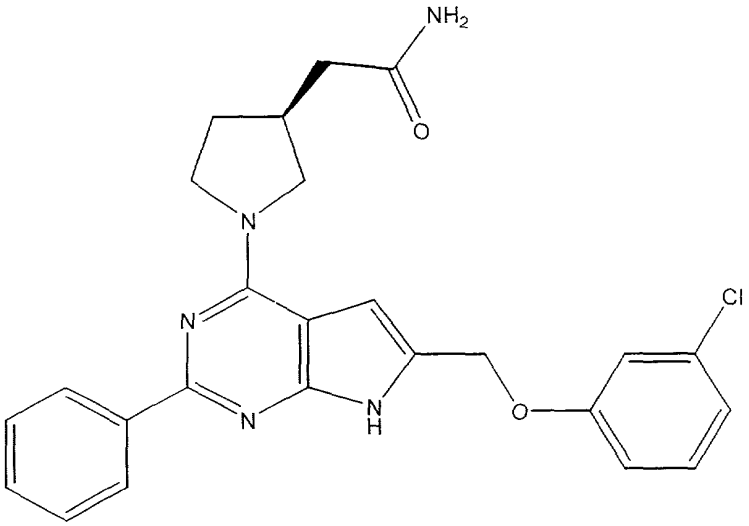


(Compound 1717)

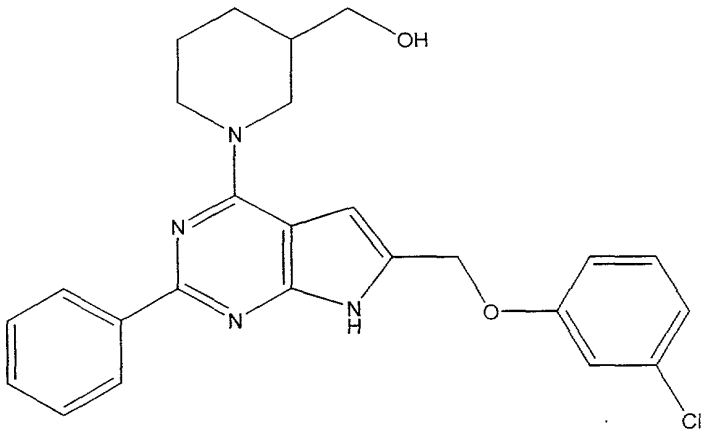
33. The compound of claim 32, having the structure:



34. The compound of claim 32, having the structure:

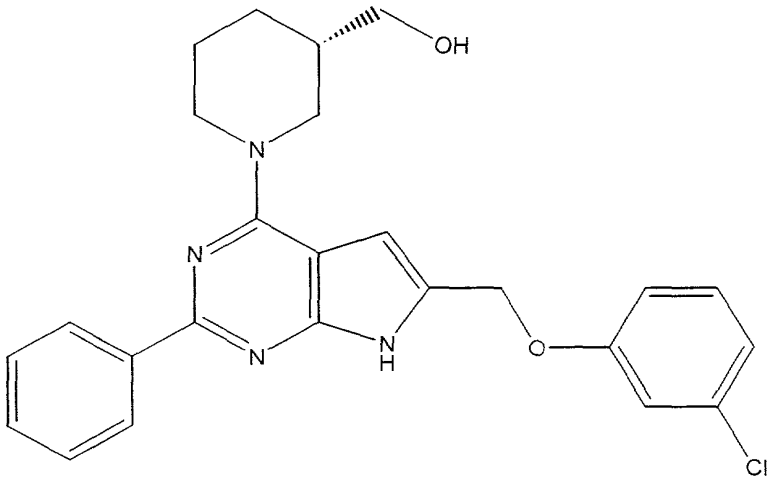


35. The compound of claim 24, having the structure:

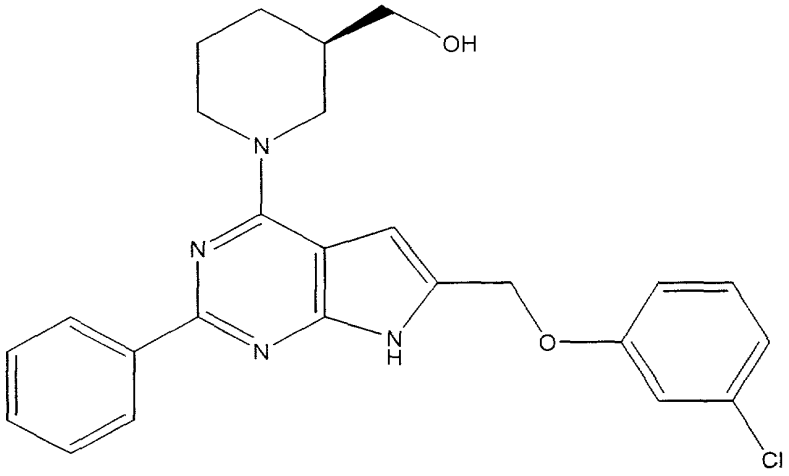


(Compound 1718)

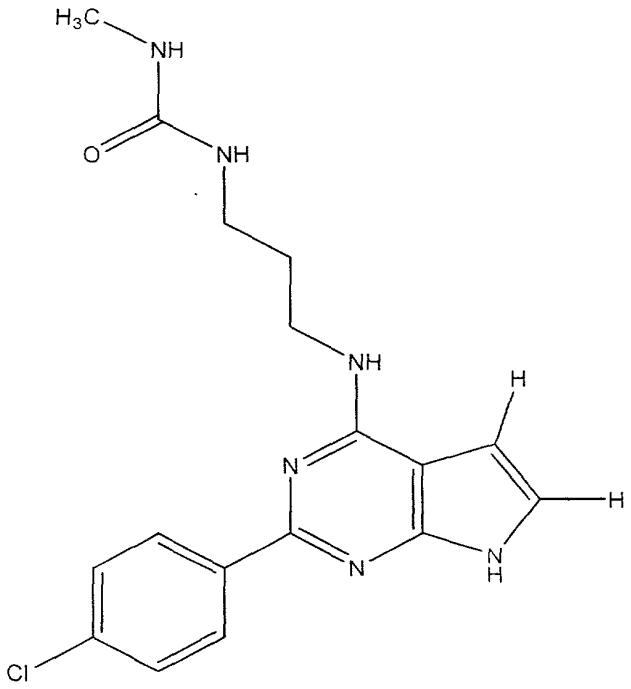
36. The compound of claim 35, having the structure:



37. The compound of claim 35, having the structure:



38. A compound having the structure:



(Compound 1719)

39. A method for treating a disease associated with A3 adenosine receptor in a subject, comprising administering to the subject a therapeutically effective amount of a compound of claims 1, 24, or 38.

40. The method of claim 39, wherein the subject is a mammal.

41. The method of claim 40, wherein the mammal is a human.

42. The method of claim 39, wherein said A3 adenosine receptor is associated with asthma, hypersensitivity, rhinitis, hay fever, serum sickness, allergic vasculitis, atopic dermantitis, dermantitis, psorasis, eczema, idiopathic pulmonary fibrosis, eosinophillic chlorecystitis, chronic

airway inflammation, hypereosinophilic syndromes, eosinophilic gastroenteritis, edema, urticaria, eosinophilic myocardial disease, episodic angioedema with eosinophilia, inflammatory bowel disease, ulcerative colitis, allergic granulomatosis, carcinomatosis, eosinophilic granuloma, familial histiocytosis, hypertension, mast cell degranulation, tumor, cardiac hypoxia, cerebral ischemia, diuresis, renal failure, neurological disorder, mental disorder, cognitive disorder, myocardial ischemia, bronchoconstriction, arthritis, autoimmune disease, Crohn's disease, Grave's disease, diabetes, multiple sclerosis, anaemia, psoriasis, fertility disorders, lupus erthyematosus, reperfusion injury, brain arteriole diameter, the release of allergic mediators, scleroderma, stroke, global ischemia, central nervous system disorder, cardiovascular disorder, renal disorder, inflammatory disorder, gastrointestinal disorder, eye disorder, allergic disorder, respiratory disorder, or immunological disorder.

43. A water-soluble prodrug of the compound of claims 1, 24, or 38, wherein said water-soluble prodrug that is metabolized *in vivo* to an active drug which selectively inhibit A_3 adenosine receptor.

44. The prodrug of claim 43, wherein said prodrug is metabolized *in vivo* by esterase catalyzed hydrolysis.

45. A pharmaceutical composition comprising the prodrug of claim 43 and a pharmaceutically acceptable carrier.

46. The pharmaceutical composition of claim 44, wherein said pharmaceutical composition is an ophthalmic formulation.

47. The pharmaceutical composition of claim 44, wherein said

pharmaceutical composition is an periocular, retrobulbar or intraocular injection formulation.

48. The pharmaceutical composition of claim 44, wherein said pharmaceutical composition is a systemic formulation.

49. A method for inhibiting the activity of an A3 adenosine receptor in a cell, which comprises contacting said cell with a compound of claims 1, 24, or 38.

50. The method of claim 49, wherein the compound is an antagonist of said A3 adenosine receptor.

51. A method for treating a gastrointestinal disorder in an subject, comprising administering to the an effective amount of the compound of claims 1, 24, or 38.

52. The method of claim 51, wherein said disorder is diarrhea.

53. The method of claim 51, wherein the subject is a human.

54. The method of claim 51, wherein the compound is an antagonist of A3 adenosine receptors.

55. A method for treating respiratory disorder in a subject, comprising administering to the subject an effective amount of the compound of claims 1, 24, or 38.

56. The method of claim 55, wherein said disorder is asthma, chronic obstructive pulmonary disease, allergic rhinitis, or an upper respiratory disorder.

57. The method of claim 55, wherein the subject is a human.

58. The method of claim 55, wherein said compound is an antagonist of A3 adenosine receptors.

59. A method for treating damage to the eye of a subject which comprises administering to said subject an effective amount of a compound of claims 1, 24, or 38.

60. The method of claim 59, wherein said damage comprises retinal or optic nerve head damage.

61. The method of claim 59, wherein said damage is acute or chronic.

62. The method of claim 59, wherein said damage is the result of glaucoma, edema, ischemia, hypoxia or trauma.

63. The method of claim 59, wherein the subject is a human.

64. The method of claim 59, wherein the compound is an antagonist of A3 adenosine receptors.

65. A combination therapy for glycoma, comprising the compound of claims 1, 24, or 38, and a prostagladin agonist, β2-2 agonist, or a muniscrinic antagonist.

66. A pharmaceutical composition comprising a therapeutically effective amount of the compound of claims 1, 24, or 38 and a pharmaceutically acceptable carrier.

67. The pharmaceutical composition of claim 66, wherein said therapeutically effective amount is effective to treat a respiratory disorder or a gastrointestinal disorder.

68. The pharmaceutical composition of claim 67, wherein said gastrointestinal disorder is diarrhea.

69. The pharmaceutical composition of claim 67, wherein said respiratory disorder is asthma, allergic rhinitis, or chronic obstructive pulmonary disease.

70. The pharmaceutical composition of claim 66, wherein said pharmaceutical composition is an ophthalmic formulation.

71. The pharmaceutical composition of claim 66, wherein said pharmaceutical composition is an periocular, retrobulbar or intraocular injection formulation.

72. The pharmaceutical composition of claim 66, wherein said pharmaceutical composition is a systemic formulation.

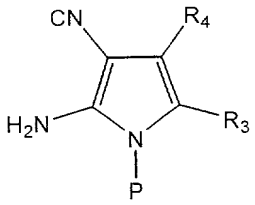
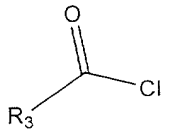
73. The pharmaceutical composition of claim 66, wherein said pharmaceutical composition is a surgical irrigating solution.

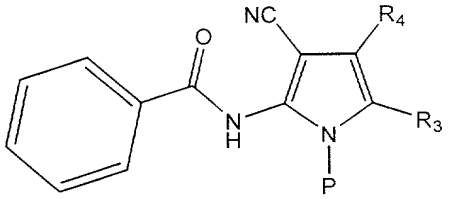
74. A packaged pharmaceutical composition for treating a disease associated with A_3 adenosine receptor in a subject, comprising:

(a) a container holding a therapeutically effective amount of the compound of claims 1, 24, or 38; and

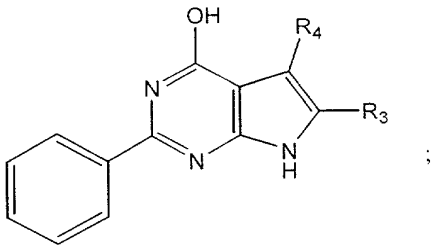
(b) instructions for using said compound for treating said disease in a subject.

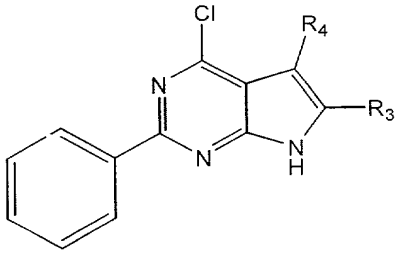
75. A method of preparing the compound of claim 1, comprising the steps of

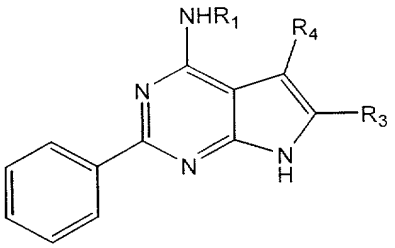
a) reacting  and 

to provide 

wherein P is a removable protecting group;

b) treating the product of step a) under cyclization conditions to provide  ;

c) treating the product of step b) under suitable conditions to provide  ; and

d) treating the chlorinated product of step c) with NH_2R_1 to provide 

wherein R_1 is 3-hydroxy cyclopentyl ethylamino carbonylamino propyl, N,N-diethylamino carbonylamino ethyl, thioacetamido ethyl, 3-amino acetyloxy cyclopentyl, 3-hydroxy cyclopentyl, 2-pyrrolyl carbonyl aminoethyl, 2-imidazolidinone ethyl, 1-aminocarbonyl-2-methyl propyl, 1-aminocarbonyl-2-phenyl ethyl, 3-hydroxy azetidino, 2-imidazolyl ethyl, acetamido ethyl, 1-(R)-phenyl-2-hydroxyethyl, or N-methylaminocarbonyl pyridyl-2- methyl;

wherein R_3 and R_4 are independently H, substituted or unsubstituted alkyl, or aryl.